

	B	C
1	Source Description	
2		
3	Phase II ID No.	1002
4	EPA ID No.	TXD083472266
5	Facility Name	Lyondell Chemical Co.
6	Facility Location	
7	City	Channelview
8	State	TX
9	Unit ID Name/No.	Utility Boiler 3
10	Other Sister Facilities	Utility Boilers 1 and 2
11	Number of Sister Facilities	2
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid injection
14	Combustor Characteristics	Babcock & Wilcox, 600,000 lbs/hr of 750 psig steam, 6 burners
15	Capacity (MMBtu/hr)	
16	Soot Blowing	Yes (Run # 3 of test condition 1)
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid waste byproducts (D001, D018, & "LLF")
22	Supplemental Fuel	Natural gas
23		Propane purge
24		
25	Stack Characteristics	
26	Diameter (ft)	5 x 15 rectangular duct
27	Height (ft)	30
28	Gas Velocity (ft/sec)	54.65
29	Gas Temperature (°F)	311
30		
31	Permitting Status	Tier I for metals and chloride
	HWC Burn Status (Date if	
32	Terminated)	

	B	C
1	Cond Description	
2		
3	1002C1	
4		
5	Report Name/Date	Recertification of Compliance for F-65630 Hot Oil Heater and Utility Boilers; 8/07/97
6	Report Preparer	Waste Min Inc.
7	Testing Firm	Waste Min Inc.
8	Testing Dates	July 8, 1997
9	Cond Dates	Jul-97
10	Cond Description	CoC; min combustion temperature
11	Content	CO emissions only; no feed analysis
12		
13	1002C2	
14		
15	Report Name/Date	Recertification of Compliance for F-65630 Hot Oil Heater and Utility Boilers; 8/31/98
16	Report Preparer	Waste Min Inc.
17	Testing Firm	Waste Min Inc.
18	Testing Dates	July 22, 1998
19	Cond Dates	Jul-98
20	Cond Description	CoC; max waste and ash feed
21	Content	PM, CO emissions only; feed analysis for ash, metals, chlorides
22		
23	1002C3	
24		
25	Report Name/Date	Recertification of Compliance for F-65630 Hot Oil Heater and Utility Boilers; 8/31/98
26	Report Preparer	Waste Min Inc.
27	Testing Firm	Waste Min Inc.
28	Testing Dates	July 23, 1998
29	Cond Dates	Jul-98
30	Cond Description	CoC; min combustion temperature
31	Content	CO emissions only; no feed analysis

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions											
2												
3										sootblow		
4	Cond ID	Comments	Units	7% O2								
5	1002C1					R1		R2		R3		Cond Avg
6												
7	CO (RA)	E1	ppmv	y		0		0		0		0
8	CO (MHRA)	E1	ppmv	y		0		0		0		0
9												
10	1002C2					R1		R2		R3		Cond Avg
11												
12	CO (RA)	E1	ppmv	y		1.42		1.45		1.32		1.4
13	CO (MHRA)	E1	ppmv	y		1.46		1.53		1.44		1.5
14	PM	E1	gr/dscf	y		0.0088		0.007		0.0122		0.0093
15												
16	Sampling Train	PM	E1									
17	Stack Gas Flowrate		dscfm			138901		144713		142806		142140.0
18	O2		%			6.4		5.2		4.4		5.3
19	Moisture		%			15.2		15.6		16.2		15.7
20	Temperature		F			310		313		312		311.7
21												
22	1002C3					R1		R2		R3		Cond Avg
23												
24	CO (MHRA)	E1	ppmv	y								3.5
25	CO (RA)	E1	ppmv	y								3.23

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Feedstreams																			
2	Cond ID No.																			
3																				
4																				
5	1002C1																			
6	Feedstream Number																			
7	Feed Class																			
8	Feedstream Description																			
9	Feed Rate	lb/hr																		
10																				
11																				
12	1002C2																			
13	Feedstream Number																			
14	Feed Class																			
15	Feed Class 2																			
16	Feedstream Description																			
17	Feed Rate	g/hr																		
18	Heating Value	Btu/lb																		
19	Thermal Feedrate	MMBtu/hr																		
20																				
21	Chlorine	g/hr																		
22	Antimony	g/hr																		
23	Arsenic	g/hr																		
24	Barium	g/hr																		
25	Beryllium	g/hr																		
26	Cadmium	g/hr																		
27	Chromium	g/hr																		
28	Lead	g/hr																		
29	Mercury	g/hr																		
30	Silver	g/hr																		
31	Thallium	g/hr																		
32																				
33	Stack Gas Flowrate	dscfm																		
34	O2	%																		
35																				
36																				
37																				
38	Feedrate MTEC Calculations																			
39	Ash	mg/dscm																		
40	Chlorine	µg/dscm																		
41	Antimony	µg/dscm																		
42	Arsenic	µg/dscm																		
43	Barium	µg/dscm																		
44	Beryllium	µg/dscm																		
45	Cadmium	µg/dscm																		
46	Chromium	µg/dscm																		
47	Lead	µg/dscm																		
48	Mercury	µg/dscm																		
49	Silver	µg/dscm																		
50	Thallium	µg/dscm																		
51	SVM	µg/dscm																		
52	LVM	µg/dscm																		
53																				
54																				
55	BIF Feedrate Limits																			
56	Antimony	g/hr																		
57	Arsenic	g/hr																		
58																				

	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
1																							
2																							
3																							
4																							
5	R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
6																							
7	F3		F3		F3		F3		F4		F4		F4		F4		F5		F5		F5		F5
8	Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		NG		NG		NG		NG		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel
9	Propane purge		Propane purge		Propane purge		Propane purge		Natural gas		Natural gas		Natural gas		Natural gas		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel
10		420		420		420		420		9518		9518		9518									
11																							
12	R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
13																							
14	F3		F3		F3		F3		F4		F4		F4		F4		F5		F5		F5		F5
15	Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel		NG		NG		NG		NG		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel
16	MF		MF		MF		MF		NG		NG		NG		NG		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel
17	Propane purge		Propane purge		Propane purge		Propane purge		Natural gas		Natural gas		Natural gas		Natural gas		Misc. Fuel		Misc. Fuel		Misc. Fuel		Misc. Fuel
18		713483		691834		716508		713483		5609107		5901342		5700000		1387975		1364132		1364643		1400000	
19		20903		20901		20902		20903		20619		20619		20470		27623		27623		27623		27402	
20		32.85		31.85		32.988		32.85		254.75		268.02		257		84.45		83		83.03		84.5	
21																							
22																							
23																							
24																							
25																							
26																							
27																							
28																							
29																							
30																							
31																							
32																							
33																							
34	138901		144713		142806		142140.0		138901		144713		142806		142140		138901		144713		142806		142140
35		6.4		5.2		4.4		5.3		6.4		5.2		4.4		6.4		5.2		4.4		5.3	
36																							
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58																							

	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
1																
2																
3																
4																
5		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
6		F6		F6		F6		F6		F7		F7		F7		F7
7		Spike		Spike		Spike		Spike		Total		Total		Total		Total
8		Ash spike		Ash spike		Ash spike		Ash spike		Total		Total		Total		Total
9																
10																
11		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
12		F6		F6		F6		F6		F7		F7		F7		F7
13		Spike		Spike		Spike		Spike		Total		Total		Total		Total
14		Ash spike		Ash spike		Ash spike		Ash spike		Total		Total		Total		Total
15																
16																
17																
18		88241		199089		205275		88.3								
19																
20		0.097		0.22		0.226				779.9		762.4		777.8		780.0
21		7430		16723		10202		11451.67								
22		3.88		8.36		19.71		10.65								
23		0.53		1.19		1.6		1.11								
24		0.04		0.1		0.13		0.09								
25		0.04		0.1		0.13		0.09								
26		0.04		0.1		0.13		0.09								
27		0.04		0.1		0.13		0.09								
28		0.04		0.1		0.13		0.09								
29		0.09		0.2		0.27		0.19								
30		0.02		0.05		0.07		0.05								
31		0.09		0.2		0.27		0.19								
32		0.04		0.1		0.13		0.09								
33																
34		138901		144713		142806		142140								
35		6.4		5.2		4.4		5.3								
36																
37																
38																
39		30.2		60.3		35.5		42.0		42.6		76.2		45.2		54.7
40		15.8		30.1		68.6		38.2		1432.5		1024.8		1047.6		1168.3
41		2.2		4.3		5.6		4.1		346.3		308.1		296.6		317.0
42		0.2		0.4		0.5		0.3		28.8		25.7		24.7		26.4
43		0.2		0.4		0.5		0.3		28.8		25.7		24.7		26.4
44		0.2		0.4		0.5		0.3		28.8		25.7		24.7		26.4
45		0.2		0.4		0.5		0.3		28.8		25.7		24.7		26.4
46		0.2		0.4		0.5		0.3		50.4		45.6		41.1		45.7
47		0.4		0.7		0.9		0.7		57.7		51.3		49.5		52.8
48		0.1		0.2		0.2		0.2		14.4		12.8		12.4		13.2
49		0.4		0.7		0.9		0.7		57.7		51.3		49.5		52.8
50		0.2		0.4		0.5		0.3		28.8		25.7		24.7		26.4
51		0.5		1.1		1.4		1.0		86.5		77.0		74.2		79.2
52		0.5		1.1		1.4		1.0		107.9		97.0		90.5		98.5
53																
54																
55																
56																
57																
58																

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
59	Barium		g/hr																	
60	Beryllium		g/hr									1312977								
61	Cadmium		g/hr									552								
62	Chromium		g/hr									764								
63	Lead		g/hr									44								
64	Mercury		g/hr									2288								
65	Silver		g/hr									7625								
66	Thallium		g/hr									75958								
67	Chlorine		g/hr									10309								
												9609								

	A	B	C
1	Process Information		
2			
3	Cond ID No.	Units	Cond Avg
4			
5	1002C1		
6			
7	Combustion Temperature	°F	626
8			
9	1002C2		
10			
11	Combustion Temperature	°F	1729